December 6, 2012

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Communication, WC Docket 11-59, PS Docket No. 11-60

Dear Ms. Dortch,

On December 4, 2012, the undersigned of PCIA—The Wireless Infrastructure Association ("PCIA") and The DAS Forum met with Renee Gregory, Legal Advisor to Chairman Genachowski, Jane Jackson, Associate Bureau Chief, Wireless Telecommunications Bureau, and Maria Kirby, Legal Advisor, Wireless Telecommunications Bureau. Discussion at the meeting focused on the current infrastructure deployment challenges facing distributed antenna system ("DAS") and small cell technologies and highlighted the opportunity to enact new policies with the creation of the 3.5 GHz small cell band plan Chairman Genachowski announced September 12, 2012.[1] The conversation largely focused on areas discussed in comments previously filed in WC Docket No. 11-59 and PS Docket No. 11-60.

In a Raymond James & Associates study published November 20, 2012, the authors predicted, based on forecasts from Infonetics, that the emerging small cell equipment market would grow from $.08 billion in 2012 to $5.9 billion by 2016.[2] The semiconductors necessary to support these intelligent devices alone is estimated to be a $2 billion industry by 2016.[3] These numbers are not unrealistic when read in conjunction with the plans AT&T made public on November 8, 2012 where the company disclosed a three-year plan which included the use of 40,000 small cells, 1,000 DAS, and 10,000 incremental macro cells.[4] The Raymond James & Associates study estimated that of the capital expenditures estimated in the AT&T plan, $80-$200 million would be used for the small cell radio equipment ($2,000-$5,000 per site), with an installed cost that may be a factor of 3-6 times higher ($6,000 - $30,000 per site).[5]

In light of the accelerated growth and maturity of the industry, PCIA highlighted several possible solutions and scenarios where deployment efficiencies could be gained. Specifically, PCIA stated the need to revisit the concepts within the National Historic Preservation Act and the National Environmental Policy Act to account for DAS and small cell technologies. In recognition of the minimal impact of small cell and DAS deployments

---

[1] Press Release, FCC, FCC Chairman Julius Genachowski Announces Plans to Initiate Formal Steps on Spectrum Recommendations from the President's Council of Advisors on Science and Technology (PCAST) (Sept. 12, 2012), http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0913/DOC-316251A1.pdf.
[2] Raymond James & Associates, *Growing Big Networks with Small Cells: Ramifications for the Supply Chain* (Nov. 20, 2012) at 1.
[3] Raymond James & Associates at 1.
[4] Press Release, AT&T, Inc., AT&T to Invest $14 Billion to Significantly Expand Wireless and Wireline Broadband Networks, Support Future IP Data Growth and New Services (Nov. 7, 2012), http://www.att.com/gen/press-room?pid=23506&cdvn=news&newsarticleid=35661&mapcode=corporate|consumer.
[5] Raymond James & Associates at 1.

and their efficient use of existing structures, DAS and small cell deployments should be excluded from Section 106 review, or in the alternative included within the "Note 1 exemption" within the FCC's environmental rules.

> . . . aerial wire or cable over existing aerial corridors of prior or permitted use or the underground installation of wire or cable along existing underground corridors of prior or permitted use, established by the applicant or others. The use of existing buildings, towers or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged.[6]

Further, PCIA noted that the FCC could achieve much the same ends by utilizing the "exempted category" provision of the Advisory Council on Historic Preservation ("ACHP") rules. Advisory Council rules (36 C.F.R. § 800.14 (c)) provide for the exemptions of Section 106 undertakings when "[t]he potential effects of the undertakings within the program or category upon historic properties are foreseeable and likely to be minimal or not adverse. . ." PCIA argued that DAS installations would almost certainly qualify, particularly in rights-of-way.

Additionally, PCIA noted the general inconsistencies in the regulatory landscape for what constitutes an undertaking for section 106 purposes when applying to wireless and wireline services. These inconsistencies reduce predictability, slowing the deployment of wireless broadband.[7]

PCIA also echoed its previous filings in response to the Commission's *Reliability and Continuity of Communications Networks, Including Broadband Technologies Notice of Inquiry*, in which PCIA noted the inherent characteristics and deployment methodologies of DAS and small cell solutions that impact their use of backup power. Often DAS and small cells are used to address capacity and coverage in areas where macro wireless sites may not be feasible, and their ability to provide this vital function could be hampered by rigid backup power requirements.[8]

In considering additional structures for attachment of DAS and small cells, PCIA and The DAS Forum urged the FCC to draw upon analogous precedent. One such existing standard is the Over-the-Air Reception Devices Rule (OTARD) which may contain useful similarities as a comparative deployment and preemptive zoning model for deployment.[9]

Finally, PCIA noted that LEED ("Leadership in Energy and Environmental Design") certified buildings often utilize materials that are highly efficient, and by their nature impermeable to radio frequency. These designs, while of great benefit for energy efficiency, also leave in-building wireless deployments as the sole solution for wireless coverage. PCIA urged the federal government as one of the largest advocates of the program, and the FCC as the expert agency to provide guidance to the LEED community regarding the inclusion of wireless telecommunications when rating properties

[6] 47 C.F.R. § 1.1306 note 1.
[7] *See* Comments of PCIA—The Wireless Infrastructure Association and The DAS Forum, WC Docket No. 11-59, at 27-31 (July 18, 2011).
[8] *See* Comments of PCIA—The Wireless Infrastructure Association and The DAS Forum, PS Docket No. 11-60, at 8 (July 7, 2011).
[9] 47 C.F.R. Section 1.4000

Pursuant to Section 1.1206 of the Commission's rules, this letter will be filed via ECFS, and a copy will be provided via email to the attendees. Please do not hesitate to contact the undersigned with any questions.

Sincerely,

D. Zachary Champ
Government Affairs Counsel
PCIA—The Wireless Infrastructure Association
901 N. Washington St., Suite 600
Alexandria, VA 22314

Cc: Renee Gregory; Jane Jackson; Maria Kirby